Lesson 61 • Sequences

Power Up

- ***Facts***
- ***Mental Math***
- ***Problem Solving***

New Concepts

- ***Examples***
- ***Practice Set***

Written Practice

Facts Express each percent as a reduced fraction.

$1\% = \frac{1}{100}$	$100\% = 1$	$50\% = \frac{1}{2}$	$70\% = \frac{7}{10}$	$20\% = \frac{1}{5}$
$150\% = 1\frac{1}{2}$	$66\frac{2}{3}\% = \frac{2}{3}$	$5\% = \frac{1}{20}$	$12\frac{1}{2}\% = \frac{1}{8}$	$90\% = \frac{9}{10}$
$25\% = \frac{1}{4}$	$2\% = \frac{1}{50}$	$10\% = \frac{1}{10}$	$33\frac{1}{3}\% = \frac{1}{3}$	$4\% = \frac{1}{25}$
$40\% = \frac{2}{5}$	$16\frac{2}{3}\% = \frac{1}{6}$	$75\% = \frac{3}{4}$	$30\% = \frac{3}{10}$	$80\% = \frac{4}{5}$

Written Practice

1. 77,000 pairs of white shoes
2. $213
3. $167
4. mean: 60, median: 56, mode: 56
5. $x = 108°$
6. Sample answer: A solution is a pair of values for x and y that make the equation a true statement. I could substitute −4 and −1 for x and y and check if the resulting statement is true.
7. The surface area of the walls of the house is 1440 ft^2.
8. a. 28.26 $in.^2$
   b. 18.84 in.

Written Practice

continued

9. $\frac{3}{2}$; $m = 4.5$

10. $x = 0.5$

11. $x = 445$

12. $x = 6$

13. $x = 5$

14. $x = \frac{5}{3}$

15. $x = 5$

16. $\frac{2.5 \text{ in.}}{\text{yr}}$

17. $54 \text{ in.} \times \frac{1 \text{ ft}}{12 \text{ in.}} = 4.5 \text{ ft or } 4\frac{1}{2} \text{ ft}$

18. $x^2 + 5x + 5$

19. a. 0.17, 17%

b. See student work. Sample response: 17% of the customers registered for the discount card.

20. a. $y = x - 1$

b. $y = -\frac{3}{4}x - 3$

21. 16 inches

22. $-6\frac{1}{3}$

Written Practice

continued

23. $\frac{u}{t}$

24. 108

25. D